**Title: Neutrino CP Violation with the European Spallation Source neutrino Super Beam project**

**Abstract**

The relatively high value of θ13 privileges the 2nd oscillation max. for the discovery of CP violation instead of the usually used 1st max. The sensitivity at this 2nd max. is about three times higher than for the 1st one inducing a lower influence of systematic errors. Going to the 2nd max. necessitates a very intense neutrino beam with the appropriate energy. The world’s most intense pulsed spallation neutron source, the ESS, will have a proton linac with 5 MW power and 2 GeV energy which can be used to discover a neutrino CP violation. The physics performance of that neutrino Super Beam in conjunction with a megaton underground WC neutrino detector installed at a distance of about 500 km from ESS has been evaluated. The choice of such voluminous detector will extent the physics program to astrophysics searches. This project is now supported by the COST Action EuroNuNet. It has also received funding from the EU H2020 research and innovation programme under grant agreement No 777419.